Claim Amendments:

Please amend claims 1 and 20 and cancel claims 2, 14-16, 31, 32, 41-49, 50, 52-67, 69, 71, 72 and 74-79 as follows:

1. (Currently Amended) A system for injecting a patient, comprising:

a container enclosing a hazardous pharmaceutical;

a first pump to deliver a hazardous pharmaceutical to a patient;

a fluid path operably connected to the first pump, the container, and the patient;

a hazardous material containment suitable to confine the hazardous pharmaceutical during connection of the hazardous pharmaceutical container to the fluid path, the hazardous material containment comprising:

a container comprising a removable lid to enable placement of the hazardous pharmaceutical container within the hazardous material containment; and

a sealing barrier through which a fluid path element can pass to be placed in fluid connection with the hazardous pharmaceutical container, the sealing barrier being suitable to prevent passage of the hazardous pharmaceutical to the environment outside of the hazardous material containment; and

a waste container suitable to contain a hazardous pharmaceutical in fluid connection with the fluid path.

2. (Cancelled)

3. (Original) The system of claim 1 wherein the hazardous materials containment includes a connector in fluid connection with a conduit passing through the hazardous materials containment in a sealed manner, the connector adapted to make a fluid connection with the container, the conduit adapted to be connected to the fluid path.

4. (Previously Presented) The system of claim 1 further comprising at least a second pump operably connected to the fluid path to deliver at least one nonhazardous fluid to the patient.

5. (Original) The system of claim 4 wherein the nonhazardous fluid is a fluid suitable to flush the medication out of the fluid path and into the body or is a fluid suitable to dilute the hazardous pharmaceutical.

6. (Original) The system of claim 5 wherein the nonhazardous fluid is saline.

7. (Original) The system of claim 4 further including a third pump operably connected to the fluid path, the third pump in fluid connection with a source of a contrast fluid.

8-9. (Cancelled)

10. (Original) The system of claim 1 further comprising at least one valve to control flow through the fluid path.

11. (Original) The system of claim 4 further comprising a controller to control the operation of at least the first pump and the second pump.

12. (Original) The system of claim 11 further comprising a user interface in operative connection with the controller.

13. (Original) The system of claim 1 wherein the hazardous material containment comprises a temperature regulator to control the temperature of the hazardous material container.

14-16. (Cancelled)

17. (Original) The system of claim 4 wherein at least the first pump and the second pump are included in a single injector.

18. (Original) The system of claim 4 wherein each of the first pump and the second pump are energized.

19. (Original) The system of claim 18 further comprising a controller to control the operation of at least the first pump or the second pump.

20. (Currently Amended) The system of claim 1 further comprising:

a measurement apparatus that detects a physiological signal of the patient; and

a controller that controls fluid delivery from at least one of the first pump and the second pump based upon the physiological signal to control fluid delivery in relation to an organ function.

21. (Original) The system of claim 1 wherein the container is a vessel in which the hazardous pharmaceutical is distributed by a manufacturer.

22. (Original) The system of claim 21 wherein the container encloses sufficient hazardous pharmaceutical for delivery to multiple patients.

23. (Original) The system of claim 1 wherein the container is filled with the hazardous pharmaceutical using a loading device that maintains biohazardous materials containment.

24. (Original) The system of claim 23 wherein the container encloses sufficient hazardous pharmaceutical for delivery to multiple patients.

25. (Previously Presented) The system of claim 1 wherein the fluid path comprises a catheter that is adapted to terminate in a blood vessel of the patient.

26. (Previously Presented) The system of claim 25 wherein the catheter comprises two lumens arranged such that flow from the outer lumen substantially surrounds flow from the inner lumen.

27. (Original) The system of claim 25 wherein the catheter is connected to the fluid path by a connector that provides biohazard containment during connection.

28. (Original) The system of claim 1 wherein the fluid path comprises at least two fluid path elements that are connected by at least one connector that provides biohazard containment during connection.

29. (Original) The system of claim 11 wherein the controller changes flow rate over time.

30. (Original) The system of claim 29 wherein the controller changes the flow such that there are periods of time during which flow rate is increased.

31-32. (Cancelled)

33. (Previously Presented) A system for injecting a pharmaceutical into an organ of a patient, comprising:

a first pump for injecting the biohazardous pharmaceutical into the local circulation;

a fluid path operably connected to the first pump and disposed between the first pump and the patient;

a second pump operably connected to the fluid path for injecting a fluid sufficient to flush the pharmaceutical out of the fluid path and into the patient;

a measurement apparatus that detects a physiological signal of the patient related to a heart phase; and

a controller that controls fluid delivery from at least one of the first pump and the second pump based upon the physiological signal to synchronize fluid delivery relative to the heart phase to prevent reflux of the pharmaceutical from the local circulation into a system circulation of the patient.

34-79. (Cancelled)